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23524 7590 01/10/2011

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MADISON, WI 53701-1497

EXAMINER

BEYEN, ZEWDU A

ART UNIT

PAPER NUMBER

2461

DATE MAILED: 01/10/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,404

03/28/2007

Eddie Riddington

088245-1052

1414

TITLE OF INVENTION: GENERIC TRAU FRAME STRUCTURE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/11/2011

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

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If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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23524 7590 01/10/2011

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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,404	03/28/2007	Eddie Riddington	088245-1052	1414

TITLE OF INVENTION: GENERIC TRAU FRAME STRUCTURE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/11/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
BEYEN, ZEWDU A	2461	370-329000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
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- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

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- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

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10/579,404	03/28/2007	Eddie Riddington	088245-1052	1414
23524	7590	01/10/2011	EXAMINER	
FOLEY & LARDNER LLP 150 EAST GILMAN STREET P.O. BOX 1497 MADISON, WI 53701-1497			BEYEN, ZEWDU A	
			ART UNIT	PAPER NUMBER
			2461	
DATE MAILED: 01/10/2011				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 351 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 351 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/579,404	RIDDINGTON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ZEWDU BEYEN	2461	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/07/2010.
2. ☒ The allowed claim(s) is/are Claims 1, 3-5, 7-8, 9, 11, 12, 38, 40, 41, 42, 43, 44, 46, 47, 49-51, 53-57, 59-61, 63, 64, 67, 68, 70, 72, 74, 76, and 77 renumbered as , 1, 2-4, 7-8, 12, 13, 14, 9, 10, 6, 5, 11, 15, 16, 17, 18-20, 21-25, 26-28, 29, 30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
|--|--|

/Z. B./  
Examiner, Art Unit 2461

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Tory D. Smith on 12/16/2010.

Art Unit: 2461

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method comprising:

determining a coding type for a speech signal via a transcoder and rate adaptor unit (TRAU);

determining a set of bits associated with each transport channel of at least two transport channels corresponding to the speech signal via the TRAU;

determining if error checking is required for one or more of the at least two transport channels, ~~wherein the at least two transport channels comprise a set of class A bits associated with a first transport channel and a set of class B bits associated with a second transport channel~~ wherein the at least two transport channels comprise a first transport channel and a second transport channel, wherein the first transport channel comprises a set of class A bits, and wherein the second transport channel comprises a set of class B bits;

computing error check bits for each transport channel that requires error checking, wherein at least a portion of the class A bits comprises a set of error check bits associated with a cyclic redundancy check;

determining a priority for each set of bits associated with each transport channel via the TRAU;

inserting into a generic TRAU frame, via the TRAU, each set of bits according to the determined priority of each set of bits, wherein the generic TRAU frame is adaptable for use with different codecs; and

inserting into the generic TRAU frame the computed error check bits associated with each transport channel that requires error checking, wherein the generic TRAU frame includes, in sequence, the set of class A bits, including the set of error check bits associated with the cyclic redundancy check, and the set of class B bits.

3. (Currently Amended) **[[A]] The** method according to claim 1, further comprising inserting control bits into the generic TRAU frame.

4. (Currently Amended) **[[A]] The** method according to claim 3, wherein the control bits are inserted at a reserved location in the generic TRAU frame.

5. (Currently Amended) **[[A]] The** method according to claim 3, wherein the control bits include a transport format combination indicator.

7. (Currently Amended) **[[A]] The** method according to claim 1, wherein the generic TRAU frame comprises an initial set of control bits.

8. (Currently Amended) **[[A]] The** method according to claim 7, wherein the set of cyclic redundancy bits are compiled based on at least one control bit.

9. (Currently Amended) A method comprising

determining a coding type for a speech signal via a converter;

locating within a generic TRAU frame, via the converter, a set of bits corresponding to each transport channel of a plurality of transport channels based on the coding type, wherein the generic TRAU frame is adaptable for use with different codecs;

locating error check bits associated with a first transport channel of the plurality of transport channels, ~~wherein the plurality of transport channels comprise a set of class A bits associated with a first transport channel and a set of class B bits associated with a second transport channel~~ wherein the plurality of transport channels comprise a first transport channel and a second transport channel, wherein the first transport channel comprises a set of class A bits, and wherein the second transport channel comprises a set of class B bits, wherein at least a portion of the class A bits comprises a set of cyclic redundancy check bits associated with a cyclic redundancy check, and wherein the generic TRAU frame includes, in sequence, the set of class A bits, including the set of cyclic redundancy check bits, and the set of class B bits;

error checking the first transport channel based on the located error check bits; and

decoding the plurality of transport channels based on the corresponding set of bits in accordance with the determined coding type.

11. (Currently Amended) [[A]] The method according to claim 9, further comprising locating a set of control bits, said control bits including an indication of the coding type of the speech signal.

12. (Currently Amended) [[A]] The method according to claim 11, wherein said set of control bits includes a transport format combination identifier.



38. (Currently Amended) [[A]] The method according to claim 1, wherein the step of inserting comprises inserting a higher priority set of bits into the generic TRAU frame before inserting a lower priority set of bits into the generic TRAU frame.

40. (Currently Amended) [[A]] The method according to claim 1, further comprising encoding the speech signal to generate a plurality of speech coefficients.

41. (Currently Amended) [[A]] The method according to claim 3, wherein the control bits comprise at least one of an indication of a number of transport channels included in the generic TRAU frame, a location in the generic TRAU frame of each set of bits associated with each transport channel, an indication of if error checking applies to the sets of bits inserted in the generic TRAU frame, and a location in the generic TRAU frame of error checking information if error checking applies.

42. (Currently Amended) [[A]] The method according to claim 5, wherein the transport format combination indicator indicates the coding type.

43. (Currently Amended) [[A]] The method according to claim 1, wherein the generic TRAU frame is configured via a configuration message used to configure a flexible layer one protocol.

44. (Currently Amended) [[A]] The method according to claim 9, further comprising receiving the generic TRAU frame at a mobile station.

46. (Currently Amended) ~~[[A]]~~ The method according to claim 9, wherein the step of decoding comprises mapping each located set of bits into a required format associated with the coding type.

47. (Currently Amended) A transcoder and rate adaptor unit (TRAU) comprising:

a converter configured to:

determine a coding type for a speech signal;

determine a set of bits associated with each transport channel of a plurality of transport channels of the speech signal;

determine if error checking is required for each transport channel of the plurality of transport channels, ~~wherein the plurality of transport channels comprise a set of class A bits associated with a first transport channel and a set of class B bits associated with a second transport channel~~ wherein the plurality of transport channels comprise a first transport channel and a second transport channel, wherein the first transport channel comprises a set of class A bits, and wherein the second transport channel comprises a set of class B bits;

compute error check bits for each transport channel that requires error checking, wherein at least a portion of the class A bits comprises a set of error check bits associated with a cyclic redundancy check;

determine a priority for each set of bits;

insert into a generic TRAU frame the sets of bits associated with each transport channel of the plurality of transport channels according to the determined priority of each set of bits, wherein the generic TRAU frame is adaptable for use with different codecs; and

insert in the generic TRAU frame the computed error check bits associated with each transport channel that requires error checking, wherein the generic TRAU frame includes, in sequence, the set of class A bits, including the set of error check bits, and the set of class B bits.

49. (Currently Amended) [[A]] The TRAU according to claim 47, further comprising a codec configured to encode a signal.

50. (Currently Amended) [[A]] The TRAU according to claim 49, wherein the codec is further configured to generate a plurality of speech coefficients.

51. (Currently Amended) [[A]] The TRAU according to claim 47, wherein the converter is further configured to insert a higher priority set of bits into the generic TRAU frame before inserting a lower priority set of bits into the generic TRAU frame.

53. (Currently Amended) [[A]] The TRAU according to claim 47, wherein the converter is further configured to insert control bits into the generic TRAU frame.

54. (Currently Amended) [[A]] The TRAU according to claim 53, wherein the control bits are inserted at a reserved location in the generic TRAU frame.

55. (Currently Amended) [[A]] The TRAU according to claim 53, wherein the control bits include a transport format combination indicator.

56. (Currently Amended) [[A]] The TRAU according to claim 55, wherein the transport format combination indicator indicates the coding type.

57. (Currently Amended) [[A]] The TRAU according to claim 53, wherein the control bits comprise at least one of an indication of a number of transport channels included in the generic TRAU frame, a location in the generic TRAU frame of the set of bits associated with each transport channel, an indication of if error checking applies to the sets of bits of the generic TRAU frame, and a location in the generic TRAU frame of error checking information if error checking applies.

59. (Currently Amended) [[A]] The TRAU according to claim 47, wherein the generic TRAU frame comprises an initial set of control bits.

60. (Currently Amended) [[A]] The TRAU according to claim 59, wherein the set of cyclic redundancy bits are compiled based on at least one control bit.

61. (Currently Amended) A transcoder and rate adaptor unit (TRAU) comprising:

a converter configured to

determine a coding type for the speech signal;

locate a set of bits within a generic TRAU frame, wherein the set of bits correspond to each transport channel of a plurality of transport channels based on

Art Unit: 2461

the coding type, and wherein the generic TRAU frame is adaptable for use with different codecs;

locate error check bits associated with a first transport channel of the plurality of transport channels, ~~wherein the plurality of transport channels comprise a set of class A bits associated with the first transport channel and a set of class B bits associated with a second transport channel,~~ wherein the plurality transport channels comprise a first transport channel and a second transport channel, wherein the first transport channel comprises a set of class A bits, and wherein the second transport channel comprises a set of class B bits, wherein at least a portion of the class A bits comprises a set of cyclic redundancy check bits associated with a cyclic redundancy check, and wherein the generic TRAU frame includes, in sequence, the set of class A bits, including the set of cyclic redundancy check bits, and the set of class B bits;

error check the first transport channel based on the located error check bits; and

decode the plurality of transport channels based on the corresponding set of bits in accordance with the determined coding type.

63. (Currently Amended) [[A]] The TRAU according to claim 61, wherein the converter is further configured to locate a set of control bits, wherein the set of control bits include an indication of the coding type of the speech signal.

64. (Currently Amended) ~~[[A]]~~ The TRAU according to claim 63, wherein the set of control bits includes a transport format combination identifier.

67. (Currently Amended) ~~[[A]]~~ The TRAU according to claim 61, wherein the converter is further configured to map each located set of bits into a required format associated with the coding type.

68. (Currently Amended) A non-transitory tangible computer-readable medium having stored thereon, computer-executable instructions that, if executed by a computing device, cause the computing device to perform operations comprising:

determining a coding type for a speech signal;

determining a set of bits associated with each transport channel of at least two transport channels corresponding to the speech signal;

determining if error checking is required for a transport channel of the at least two transport channels, ~~wherein the at least two transport channels comprise a set of class A bits associated with a first transport channel and a set of class B bits associated with a second transport channel~~ wherein the at least two transport channels comprise a first transport channel and a second transport channel, wherein the first transport channel comprises a set of class A bits, and wherein the second transport channel comprises a set of class B bits;

computing error check bits for each transport channel that requires error checking, wherein at least a portion of the class A bits comprises a set of error check bits associated with a cyclic redundancy check;

determining a priority for each set of bits associated with each transport channel;

inserting each set of bits into a generic transcoder and rate adaptor unit (TRAU) frame according to the determined priority of each set of bits, wherein the generic TRAU frame is adaptable for use with different codecs; and

inserting into the generic TRAU frame the computed error check bits associated with each transport channel that requires error checking, wherein the generic TRAU frame includes, in sequence, the set of class A bits, including the set of error check bits associated with the cyclic redundancy check, and the set of class B bits.

70. (Currently Amended) ~~[[A]] The non-transitory tangible~~ computer-readable medium according to claim 68, wherein the step of inserting further comprises inserting a higher priority set of bits into the generic TRAU frame before inserting a lower priority set of bits into the generic TRAU frame.

72. (Currently Amended) A ~~non-transitory tangible~~ computer-readable medium having stored thereon, computer-executable instructions that, if executed by a computing device, cause the computing device to perform operations comprising:

determining a coding type for a speech signal;

locating a set of bits within a generic transcoder rate adaptor unit (TRAU) frame, wherein the set of bits correspond to each transport channel of a plurality of

transport channels based on the coding type, and wherein the generic TRAU frame is adaptable for use with different codecs; and

locating error check bits associated with a first transport channel of the plurality of transport channels, ~~wherein the plurality of transport channels comprise a set of class A bits associated with the first transport channel and a set of class B bits associated with a second transport channel,~~ wherein the plurality transport channels comprise a first transport channel and a second transport channel, wherein the first transport channel comprises a set of class A bits, and wherein the second transport channel comprises a set of class B bits, wherein at least a portion of the class A bits comprises a set of cyclic redundancy check bits associated with a cyclic redundancy check, and wherein the generic TRAU frame includes, in sequence, the set of class A bits, including the set of cyclic redundancy check bits, and the set of class B bits;

error checking the first transport channel based on the located error check bits; and

decoding the plurality of transport channels based on the corresponding set of bits in accordance with the determined coding type.

74. (Currently Amended) ~~[[A]] The non-transitory tangible~~ computer-readable medium according to claim 72, wherein the instructions cause the computing device to perform operations further comprising receiving the generic TRAU frame.



76. (Currently Amended) ~~[[A]]~~ ~~The non-transitory tangible~~ computer-readable medium according to claim 72, wherein the instructions cause the computing device to perform operations further comprising mapping each located set of bits into a required format associated with the coding type.

77. (Currently Amended) A network element comprising:

- a transcoder and rate adaptor unit (TRAU) configured to:
  - determine a coding type for a speech signal;
  - determine a set of bits associated with each transport channel of a plurality of transport channels of the speech signal;
  - determine if error checking is required for a transport channel of the plurality of transport channels, ~~wherein the plurality of transport channels comprise a set of class A bits associated with a first transport channel and a set of class B bits associated with a second transport channel~~ wherein the plurality transport channels comprise a first transport channel and a second transport channel, wherein the first transport channel comprises a set of class A bits, and wherein the second transport channel comprises a set of class B bits;
  - compute error check bits for each transport channel that requires error checking, wherein at least a portion of the class A bits comprises a set of error check bits associated with a cyclic redundancy check;
  - determine a priority for each set of bits; and

insert into a generic TRAU frame the sets of bits associated with each transport channel of the plurality of transport channels according to the determined priority of each set of bits, wherein the generic TRAU frame is adaptable for use with different codecs; and

insert into the generic TRAU frame the computed error check bits associated with each transport channel that requires error checking, wherein the generic TRAU frame includes, in sequence, the set of class A bits, including the set of error check bits associated with the cyclic redundancy check, and the set of class B bits.

#### **Allowable Subject Matter**

Claims 1, 3-5, 7-8,9, 11, 12, 38, 40,41,42,43,44, 46, 47, 49-51, 53-57, 59-61, 63, 64, 67, 68, 70, 72,74, 76, and 77

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZEWDU BEYEN whose telephone number is (571)270-7157. The examiner can normally be reached on Monday thru Friday, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 1-571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2461

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huy D Vu/

Supervisory Patent Examiner, Art Unit 2461